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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER KRYLOVA, IRINA	
			ART UNIT 1796	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/534,984

Applicant(s)

HIGAKI ET AL.

Examiner

Irina Krylova

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2 and 7-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2, 7-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/22)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The amendment filed by Applicant on December 3, 2009 has been fully considered. The amendment to claim 1 and cancellation of claim 11 are acknowledged. Specifically, claim 1 has been amended to include limitations of the content of bonded vinyl cyanide in component [D] being 31-45%mass and the content of bonded vinyl cyanide compounds in an acetone-soluble fraction of the thermoplastic resin being 30-45%mass with respect to the acetone-soluble fraction. These limitations were not previously presented and were taken from instant specification (see p. 17, lines 21-22 and p.22, lines 6-11 of the instant specification). All previous rejections are maintained. The following action is made final.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. Claims 2, 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Miyajima et al** (US 5,635,565) in view of **Guntherberg et al** (US 6,323,279).

The rejection is adequately set forth on pages 3-11 of an Office Action mailed on September 3, 2009 and is incorporated here by reference.

3. Claims 2, 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Miyajima et al** (US 5,635,565) in view of **Mishima et al** (US 5,466,759).

The rejection is adequately set forth on pages 11-16 of an Office Action mailed on September 3, 2009 and is incorporated here by reference.

4. Claims 2, 7-10 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Jung** (US 6,114,442) in view of **Mishima et al** (US 5,466,750).

The rejection is adequately set forth on pages 16-21 of an Office Action mailed on September 3, 2009 and is incorporated here by reference.

5. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Miyajima et al** (US 5,635,565) in view of **Guntherberg et al** (US 6,323,279), in further view of **Jung** (US 6,114,442).

The rejection is adequately set forth on pages 22-23 of an Office Action mailed on September 3, 2009 and is incorporated here by reference.

6. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Miyajima et al** (US 5,635,565) in view of **Mishima et al** (US 5,466,759) in further view of **Jung** (US 6,114,442).

The rejection is adequately set forth on pages 23-25 of an Office Action mailed on September 3, 2009 and is incorporated here by reference.

7. Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kim et al** (US 5,747,587).

The rejection is adequately set forth on pages 25-28 of an Office Action mailed on September 3, 2009 and is incorporated here by reference.

8. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kim et al** (US 5,747,587) in view of **Jung** (US 6,114,442).

The rejection is adequately set forth on pages 28-30 of an Office Action mailed on September 3, 2009 and is incorporated here by reference.

Response to Arguments

9. Applicant's arguments filed on December 3, 2009 have been fully considered but they are not persuasive.

10. Regarding the rejection of claims 2, 7-10 under 35 U.S.C. 103(a) as being unpatentable over **Miyajima et al** (US 5,635,565) in view of **Guntherberg et al** (US 6,323,279), Applicant argues that

a) **Miyajima et al** contains no disclosure of 5-40%mass of a copolymer having a bonded cyanide content of 31-45%mass [D] and 5-25%wt of copolymer of a vinyl monomer having a bonded vinyl cyanide content of less than 30%mass [E];

b) Example 7 contains a mixture of styrene/acrylonitrile copolymer having the same acrylonitrile content of 25%; whereas the Office Action recites that the styrene/acrylonitrile copolymers comprising different content of vinyl cyanide monomer (25% and 30%);

c) there is no suggestion of a formulation comprising an acrylic rubber and a diene rubber; acrylic rubber and ABS resin are recited as possible rubbers for components (A) and (B) of **Miyajima et al**;

- d) while example 8 of **Miyajima et al** comprises the thermoplastic resins having 25% acrylonitrile and 30% acrylonitrile, such example is having a bonded vinyl cyanide in the acetone soluble fraction, according to Applicant's calculations, of 27.2%;
- e) **Guntherberg et al** discloses the use of two thermoplastic polymers having acrylonitrile contents of 19-31% and 31-37%, however, the composition is in absence of acrylic rubbery polymer and limited only to a diene rubbery polymer;
- f) though **Guntherberg et al** discloses two types of AS resin, B1 having acrylonitrile content of 25%, while B3 having an acrylonitrile content of 30% (example 9, Table 3), there is no disclosure of component [D] having a bonded cyanide content of 31-45%mass.

11. Examiner disagrees.

1) **Miyajima et al** discloses a thermoplastic resin composition comprising (col. 7, lines 32-35):

A) 5-99% of a modified acrylic rubber obtained by polymerizing:

- a) 50-85%wt of a rubber, such as acrylic (col. 2, lines 45-67);
- b) 5-48%wt of an aromatic vinyl compound;
- c) **2-45%wt of a vinyl cyanide** (col. 2, lines 32-40)

B) 1-95%wt of additional thermoplastic resin used alone or in **combination of two or more** comprising:

B1) rubber-modified thermoplastic resin obtained by polymerizing a monomer mixture comprising an aromatic vinyl compound and a vinyl cyanide in the presence of a

rubbery polymer, wherein the rubbery polymer comprises a **diene rubber** (col. 6, lines 35-47; col. 2, lines 44-67);

B2) copolymers obtained by polymerizing a monomer mixture comprising an **aromatic vinyl compound** and a **vinyl cyanide**, wherein the proportion of the vinyl cyanide is **1 to 50% by weight** (col. 6, lines 54-67; col. 7, lines 1-5).

Therefore, **Miyajima et al** states that the component B) may be a mixture of rubber--modified thermoplastic resin obtained by polymerizing a monomer mixture comprising an aromatic vinyl compound and a vinyl cyanide in the presence of a rubbery polymer, and copolymers of aromatic vinyl compound and vinyl cyanide as well.

2) The rubbers used as the component A) include acrylic rubber and butadiene rubber (col. 2, lines 44-60), wherein the rubbery polymers are used in admixture of two or more (col. 2, lines 65-67). Therefore, **Miyajima et al** clearly states that the mixture of acrylic rubber and diene rubber may be used as well. As the component B) rubber, **Miyajima et al** recites ABS, AES, AAS resins, wherein ABS rubber is cited as preferable (col. 6, lines 62-65). Furthermore, if ABS rubber is preferably used as component B) rubber and **Miyajima et al** recites that rubber-modified resin B) being other than the rubber-modified resin A) (col. 6, lines 45-46), therefore, it would have been obvious to a skilled artisan that rubber used as component A) should be other than diene rubber, i.e. acrylic rubber. Further, case law holds that the selection of a known material based on its suitability for its intended use supports prima facie obviousness. *Sinclair & Carroll Co vs. Interchemical Corp.*, 325 US 327, 65 USPQ 297 (1045).

3) Though Table 2 of **Miyajima et al** is presented not to a scale, and Example 7 was erroneously cited as disclosing a mixture of two styrene/acrylonitrile copolymers having 25% and 30% of acrylonitrile; however, Examples 8 and 9 in Table 2 present a mixture of two styrene/acrylonitrile copolymers having 25% acrylonitrile and 30% of acrylonitrile. Therefore, **Miyajima et al** clearly shows that the mixture of two styrene/acrylonitrile copolymers having different content of acrylonitrile, wherein the proportion of the vinyl cyanide is 1 to 50% by weight, may be used (col. 6, lines 54-67; col. 7, lines 1-5). Since the content of vinyl cyanide in the components of the composition of **Miyajima et al** falls within the ranges of the content of vinyl cyanide claimed in the instant invention, therefore, it would have been obvious that the content of the bonded vinyl cyanide in the acetone-soluble fraction of the composition of **Miyajima et al** will fall within the same range for bonded vinyl cyanide in the acetone-soluble fraction claimed in the instant invention.

4) The example 8 of **Miyajima et al** comprises the thermoplastic resins having 25% acrylonitrile and 30% acrylonitrile (see Table 2). Though the content of bonded vinyl cyanide in the acetone soluble fraction, according to Applicant's calculations, in Example 8 is 27.2%; whereas the content of bonded vinyl cyanide as claimed in the instant invention is 30%, nevertheless, it is the examiner's position that a) calculations are based on just one example and b) the values are close enough that one of ordinary skill in the art would have expected the same properties. Case law holds that a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to

have the same properties. *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985).

5) Therefore, **Miyajima et al** teaches that a) rubbers for components A) and B) should be different; b) rubber for component B) is preferably ABS rubber (i.e. diene rubber); c) the mixture of rubber modified thermoplastic resin with styrene/acrylonitrile copolymers having different acrylonitrile content (Table 2), appears to be used as component B).

6) Though **Miyajima et al** fails to specify the combination of:

e1) 5-40%mass of a copolymer of an aromatic vinyl compound with a vinyl cyanide, wherein the bonded vinyl cyanide content is 30 to 50%mass and

e2) 5-25%mass of a copolymer of an aromatic vinyl compound with a vinyl cyanide, wherein the bonded vinyl cyanide content is less than 30%mass, **Guntherberg et al** discloses a thermoplastic molding composition comprising:

A') 5-80%wt of a graft polymer comprising;

a1') 40-90%wt of elastomeric conjugated diene;

a2') 10-60%wt of a graft made from a vinyl aromatic monomer and 5-35%wt of acrylonitrile;

B') 20-95%wt of thermoplastic polymer comprising:

b1') 69-81%wt of vinylaromatic monomer;

b2') **19-31%wt of acrylonitrile**; specifically

component B') consisting essentially of 71-78%wt of styrene and 22-29%wt of acrylonitrile (col. 9, lines 30-35);

C') 0-95%wt, preferably 0-70%wt, of thermoplastic polymer comprising:

c1') 63-69%wt of vinylaromatic monomer;

c2') **31-37%wt of acrylonitrile** (col. 10, lines 50-65), specific example D1 in Table 3

provides the content of **acrylonitrile of 33%wt** (see col. 20, Table 3), wherein the molding composition of **Guntherberg et al** comprises good mechanical properties, high strength and toughness, good impact strength, even at low temperatures (col. 2, lines 12-18), good pigmentability (col.3, lines 34-40).

7) Since **Miyajima et al** teaches that a) rubbers for components A) and B) should be different; b) rubber for component B) is preferably ABS rubber (i.e. diene rubber); wherein the mixture of rubber (ABS) modified thermoplastic resin with styrene/acrylonitrile copolymers having different acrylonitrile content (Table 2) appear to be used as component B) and

Guntherberg et al discloses a composition comprising a diene rubber-modified resin in admixture with two vinyl aromatic/acrylonitrile resins, one having 19-31%wt of acrylonitrile and the other having 31-37%wt acrylonitrile, wherein the molding composition of **Guntherberg et al** comprises good mechanical properties, high strength and toughness, good impact strength, even at low temperatures (col. 2, lines 12-18), and good pigmentability (col.3, lines 34-40), therefore, it would have been obvious to a one of ordinary skill in the art at the time of the invention was made to include the

composition of **Guntherberg et al** as a (B) component into composition of **Miyajima et al** to provide the composition of **Miyajima et al** with good impact strength, even at low temperatures (see col. 2, lines 12-18 in **Guntherberg et al**) and good pigmentability (see col.3, lines 34-40 in **Guntherberg et al**) as well.

8) Though **Guntherberg et al** does not recite the mixture of acrylic rubber and diene rubber, however, **Guntherberg et al** is a secondary reference showing the mixture of diene rubber-modified resin with styrene/acrylonitrile copolymers having different content of vinyl cyanide, having excellent physical properties and thus obviously being usefull as a component B) in the composition of **Miyajima et al** to improve physical properties of composition of **Miyajima et al** as well. Secondary reference does not need to teach all limitations. "It is not necessary to be able to bodily incorporate the secondary reference into the primary reference in order to make the combination." *In re Nievelt*, 179 USPQ 224 (CCPA 1973).

9) It is noted that Table 3 of **Guntherberg et al** shows different styrene-acrylonitrile copolymers, wherein component D1 of **Guntherberg et al** comprises 67%wt of styrene and 33%wt of acrylonitrile (Table 3).

12. Regarding the rejection of claims 2, 7-10 under 35 U.S.C. 103(a) as being unpatentable over **Miyajima et al** (US 5,635,565) in view of **Mishima et al** (US 5,466,759), Applicant argues that

- a) **Mishima et al** discloses only one graft copolymer; therefore, there is no combination of acrylic rubbery polymer and diene rubber polymer;
- b) while the copolymer E) having 30% acrylonitrile and copolymer A) having an acrylonitrile content of 28% are disclosed, there is no disclosure of an aromatic vinyl copolymer having a bonded vinyl cyanide content of 31-45% by mass.

13. Examiner disagrees.

1) **Mishima et al** discloses injection molding composition comprising (col. 2, lines 34-64):

A') 15-80 pbw of a copolymer comprising:

a1') 60-85%wt of a methylstyrene;

a2') 15-35%wt of vinyl cyanide units, specifically **28%** acrylonitrile (example A-1, Table 2, col. 7);

B') 5-40 pbw of a graft copolymer comprising:

b1') 40-90 pbw of a rubbery polymer comprising diene rubber (col. 3, lines 59-60);

b2') 10-60 pbw of a monomer mixture comprising a vinyl cyanide monomer and aromatic vinyl monomer;

E') 0.5-10 pbw of a copolymer comprising:

e1') 5-40%wt vinyl cyanide units, specifically **30%** acrylonitrile (Example E-5, Table 1, col. 7);

e2') 0-65% another vinyl monomer comprising styrene and/or methylstyrene,

specifically 5% styrene and 5% methylstyrene (Example E-5, Table 1), wherein the injection molding composition of **Mishima et al** comprises a good balance of impact strength and non-peeling property and is excellent in moldability (Abstract).

2) Therefore, **Mishima et al** discloses a composition comprising a combination of diene rubber modified polymer with two styrene/ vinyl cyanide copolymers, having a good balance of impact strength and non-peeling property and is excellent in moldability (Abstract). Though specific example provided by **Mishima et al** recites component E) having 30% of acrylonitrile, however, component E) is recited by **Mishima et al** as having 5-40%wt of vinyl cyanide units col. 2, lines 58-60), therefore, it appears that styrene/vinyl cyanide copolymers having up to 40% of vinyl cyanide units are within **Mishima et al's** disclosure as well. A reference is not limited to the working examples, *see In re Fracalossi*, 215 USPQ 569 (CCPA 1982).

3) Though **Mishima et al** does not recite the mixture of acrylic rubber and diene rubber, however, **Mishima et al** is a secondary reference showing the composition comprising a mixture of diene rubber-modified resin with styrene/acrylonitrile copolymers having different content of vinyl cyanide, the composition having excellent physical properties and thus obviously being usefull as a component B) in the composition of **Miyajima et al** to improve physical properties of composition of **Miyajima et al** as well. Secondary reference does not need to teach all limitations. "It is not necessary to be able to bodily

incorporate the secondary reference into the primary reference in order to make the combination." *In re Nievelt*, 179 USPQ 224 (CCPA 1973).

14. Regarding the rejection of claims 2, 7-10 under 35 U.S.C. 103(a) as being unpatentable over **Jung** (US 6,114,442) in view of **Mishima et al** (US 5,466,750), Applicant argues that though **Jung** discloses a composition comprising ABS resin, ASA resin and AS resin, however, the content of bound vinyl cyanide in vinyl aromatic copolymer is below 31-45%mass, specifically the vinyl cyanide content of copolymers C,D and E are all below 25%; **Mishima et al** does not cure the defects since the disclosure of a vinyl cyanide content of 30% is not a disclosure of a content of 31-45%mass.

15. Examiner disagrees.

1) Though the styrene/acrylonitrile copolymers C) and D) of **Jung** appear to have the content of acrylonitrile of less than 30%; however, as discussed above, **Mishima et al** discloses styrene/ vinyl cyanide copolymers having 5-40%wt of vinyl cyanide units (col. 2, lines 58-60), wherein the content of 30%, as argued by Applicant, is only a specific example cited by **Mishima et al**. Therefore, it appears that styrene/vinyl cyanide copolymers having up to 40% of vinyl cyanide units are within **Mishima et al's** disclosure as well.

2) Since the composition of **Jung** is used for making automobile parts and the composition of **Mishima et al** comprises a good impact strength and excellent

moldability to produce injection molded articles (see Abstract in **Mishima et al**), therefore, it would have been obvious to a one of ordinary skill in the art to combine **Jung** and **Mishima et al** to provide the automobile parts of Jung with impact strength and excellent moldability, as disclosed by **Mishima et al**, as well.

16. Regarding the rejection of claims 2 and 7 under 35 U.S.C. 103(a) as being unpatentable over **Kim et al** (US 5,747,587) and the rejection of claims 8-10 under 35 U.S.C. 103(a) as being unpatentable over **Kim et al** (US 5,747,587) in view of **Jung** (US 6,114,442), Applicant argues that **Kim et al** discloses a copolymer C) having an acrylonitrile content of 40%wt and copolymer D) having 33%wt of acrylonitrile, and there is no disclosure of a vinyl aromatic copolymer having a bonded vinyl cyanide content of less than 30%mass. There is also no disclosure of a composition having 30-45% of bonded vinyl cyanide content by use of components [D] and [E] as claimed.

17. Examiner disagrees.

1) **Kim et al** discloses a resin composition comprising:

A) a graft polymer comprising:

- a1) 100 pbw of a monomer mixture of vinyl cyanide and an aromatic vinyl compound;
- a2) 20-60 pbw of a conjugated **diene rubber** (col. 2, lines 35-40);

B) a graft polymer obtained by grafting:

- b1) 100 pbw of monomer mixture of vinyl cyanide and an aromatic vinyl compound;
- b2) 20-60 pbw of an **acrylic rubber** (col. 2, lines 40-45);

C) a copolymer comprising:

c1) **38-45%wt** of vinyl cyanide units;

c2) 62-55%wt of an aromatic vinyl compound (col. 4, lines 55-67);

D) a copolymer comprising:

d1) **28-35%wt** of vinyl cyanide compound;

d2) 72-65% of an aromatic vinyl compound (col. 5, lines 23-35).

Therefore, the copolymer D) may have the content of vinyl cyanide as low as 28%wt, i.e. lower than 30%wt. Furthermore, **Kim et al** teaches that for improving physical properties of the composition, a copolymer having less content of a vinyl cyanide is added (col. 5, lines 49-58). Thus, the component D) having the content of vinyl cyanide as low as 28%wt appears to be essential component for improving physical properties of the composition of **Kim et al**.

2) Though **Kim et al** does not explicitly state the composition having 30-45% of bonded vinyl cyanide content by use of components [D] and [E], nevertheless, since the total content of bonded vinyl cyanide in the composition depend on the specific ratio between components C) and D) and the specific content of vinyl cyanide in both C) and D) copolymers, and since all ranges in the components of the composition of **Kim et al** overlap with the ranges of the component of the composition claimed in the instant invention, therefore, it would have been obvious to a one of ordinary skill in the art that the content of bonded vinyl cyanide compounds in the composition of **Kim et al** will fall

within the same ranges as the content of bonded vinyl cyanide claimed in the instant invention.

18. Applicant's argues there would be no motivation for combining references directed to address specific problems. Specifically,

a) **Miyajima et al** provides composition having mechanical strength, whereas

Guntherberg et al seek the preparation of molding composition having little intrinsic color. Thus, the references are having fundamentally different goals.

b) **Mishima et al** is directed to a non-flammable injection-molding composition; whereas **Miyajima et al** provides composition having mechanical strength.

c) **Jung** describes goals of chemical and heat resistance, which are different from non-flammability goals of **Mishima et al**.

d) **Jung** describes goals of chemical and heat resistance for use in automotive part, while **Kim et al** is directed to a HCFC resistant composition for use in refrigerator box. Chemical resistance between chemicals which contact automotive parts are different from HCFC found in refrigerator box.

19. Examiner disagrees.

1) **Guntherberg et al** discloses a composition having not only little intrinsic color, but having good mechanical properties, specifically, high strength and toughness (col. 2, lines 12-18), that can be processed by molding process (Abstract). Therefore, **Miyajima et al** is seeking to improve mechanical properties, while **Guntherberg et al** appear to

be reciting the composition comprising high strength and toughness, and thus it would have been obvious to combine **Guntherberg et al** and **Miyajima et al** to improve impact strength of the composition of **Miyajima et al** as well.

2) **Mishima et al** is directed to a non-flammable injection-molding composition, but also having excellent moldability and good impact strength (Abstract). Therefore, **Miyajima et al** is seeking to improve mechanical properties, while **Mishima et al** appear to be reciting the composition comprising excellent moldability and good impact strength, and thus it would have been obvious to combine **Mishima et al** and **Miyajima et al** to improve impact strength of the composition of **Miyajima et al** as well.

3) **Jung** describes automobile parts having chemical and heat resistance (col. 1, lines 6-12), while **Mishima et al** discloses injection-molding composition having excellent moldability and good impact strength (Abstract). Therefore, it would have been obvious to a one of ordinary skill in the art at the time of the invention was made to combine **Mishima et al** and **Jung** to provide the automobile parts of **Jung** with good impact strength in addition to chemical resistance and heat resistance as well.

4) **Kim et al** discloses a composition similar to the composition of **Jung** and that claimed in the instant invention. Though **Kim et al** does not specify the use of the composition for making automobile parts, however, since the composition of **Kim et al** is similar to the composition of **Jung** and that claimed in the instant invention, whereas as the composition of **Jung** is used for making automobile parts, therefore, it would have been obvious to a one of ordinary skill in the art that the composition of **Kim et al** may be used for making automobile parts as well.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irina Krylova whose telephone number is (571)270-7349. The examiner can normally be reached on Monday-Friday 7:30am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasudevan Jagannathan can be reached on (571)272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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